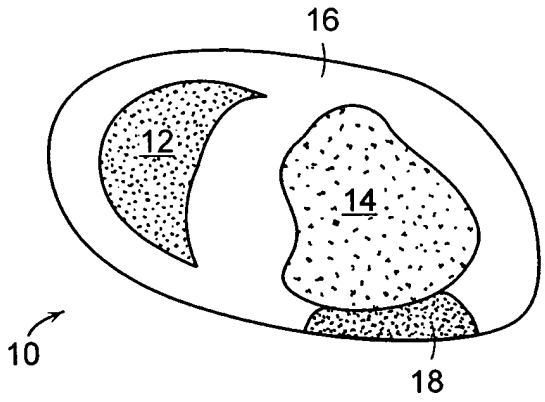

PRIOR ART

FIG. 1

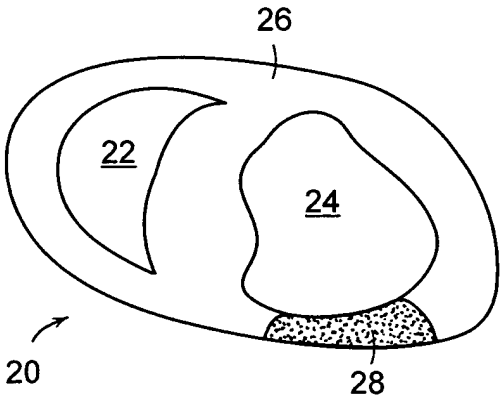

FIG. 2

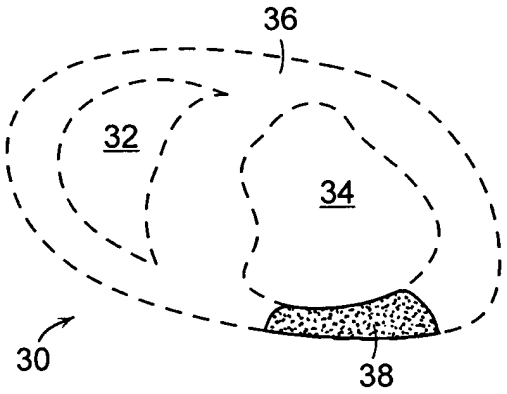

FIG. 3

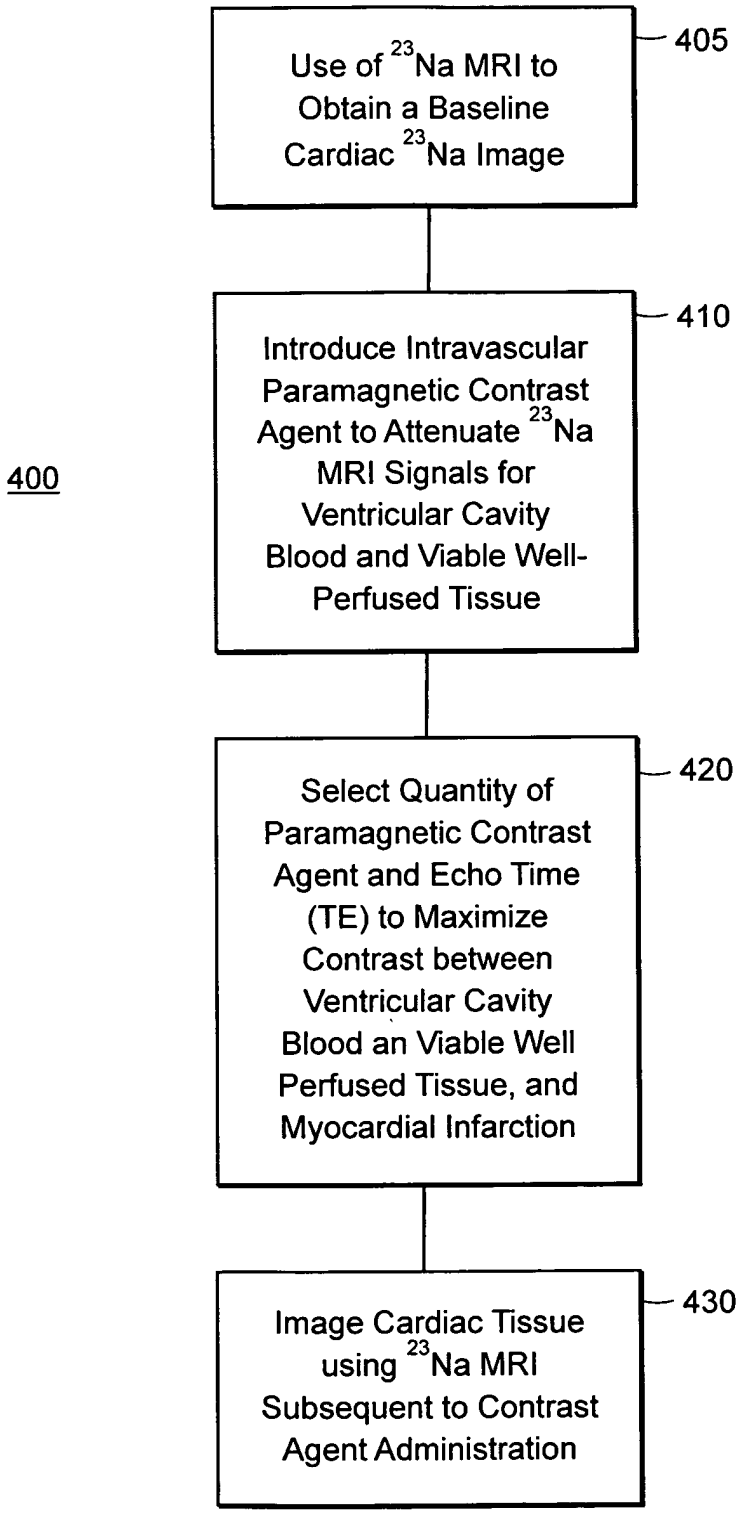

FIG. 4

Normalized signal intensity variation with MION volume at different echo times (0.37–5 ms) in 80 ml of isolated canine blood. Larger MION volume and echo times lead to larger signal intensity reductions.

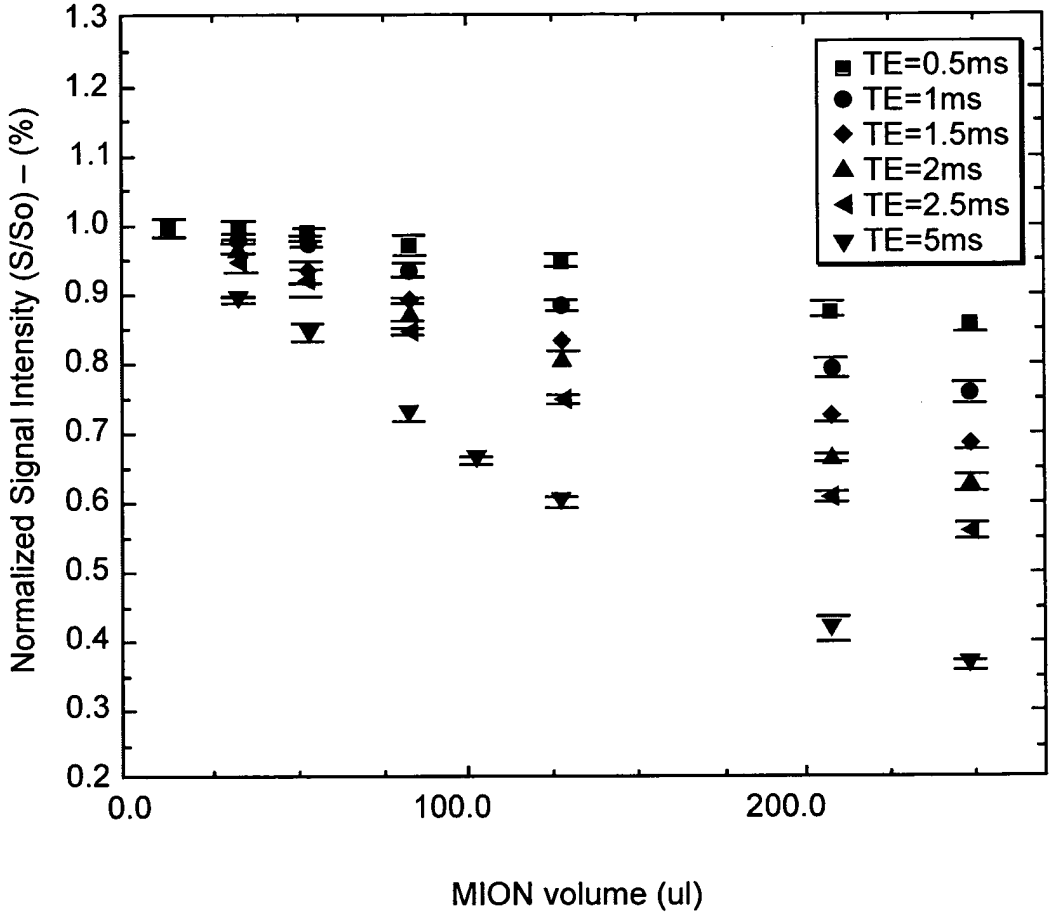

FIG. 5

Blood T_1 variation curves vs. MION volume in 80 ml of canine blood *in vitro*

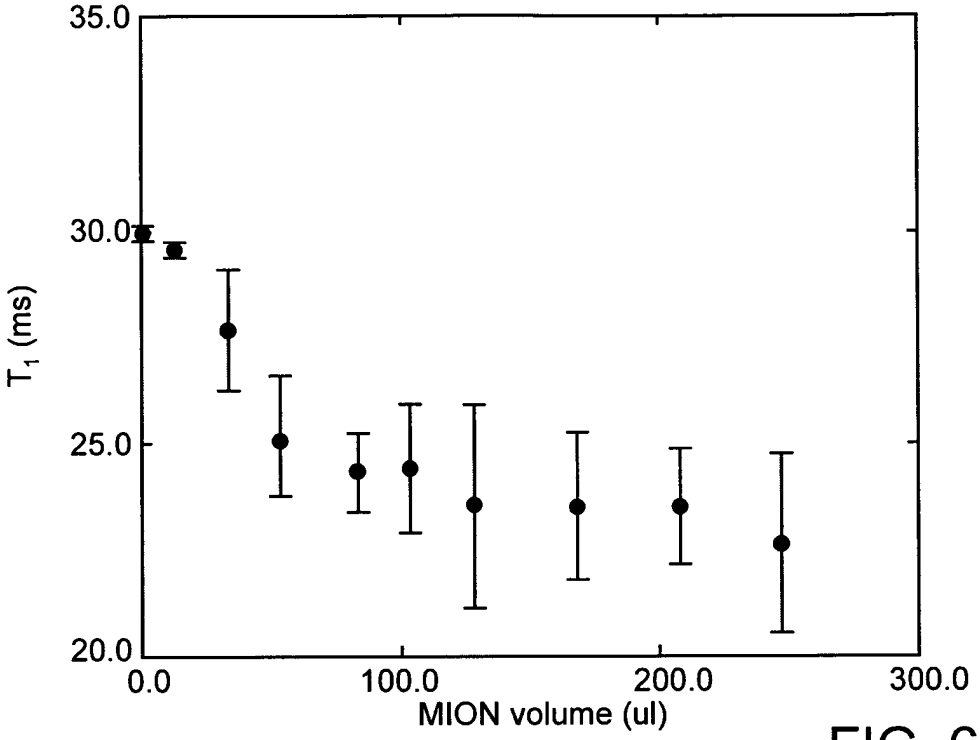

FIG. 6A

Blood T_2 variation curves vs. MION volume in 80 ml of canine blood *in vitro*

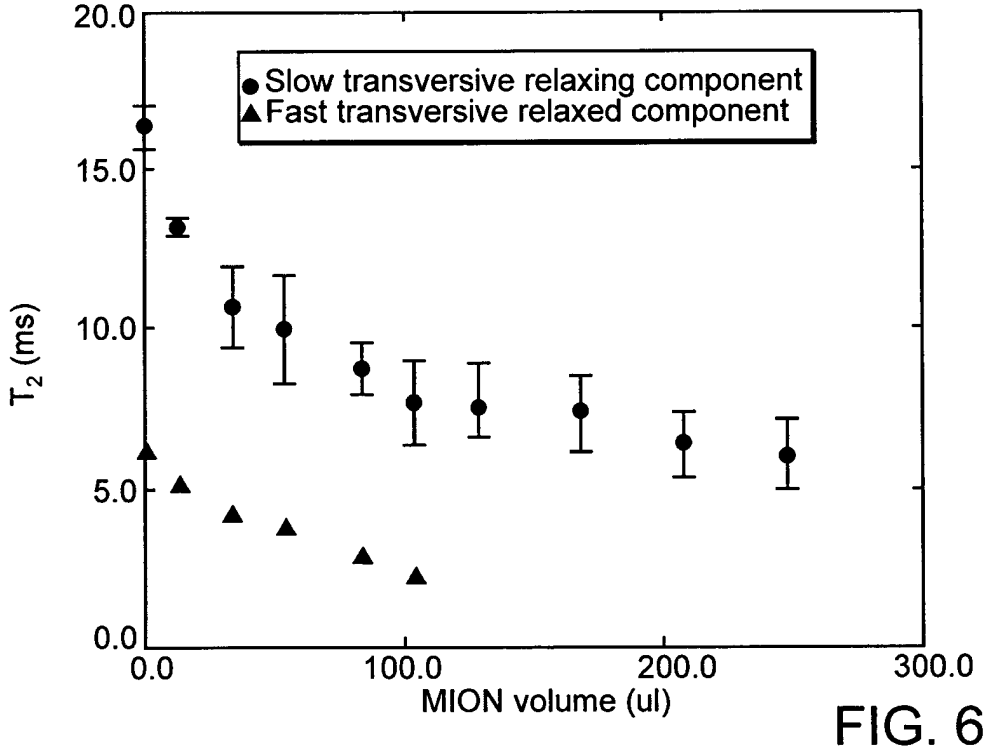

FIG. 6B

Two compartment annular cylindrical phantom. Coronal image of the agarose gel mixed with NaCl (65 mM) at TE=0.37 ms

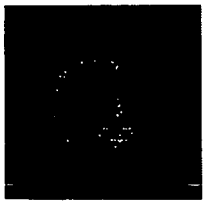

FIG. 7A

Identical image with added blood at TE=0.37 ms

FIG. 7B

At TE=5 ms

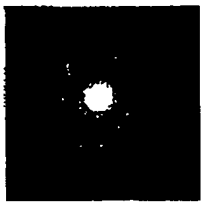

FIG. 7C

Post-contast image at TE=5 ms

FIG. 7D

At TE=0.37 ms

FIG. 7E

Pre-contrast sequential contiguous axial ^{23}Na images from an *in vivo* dog heart. Left ventricular blood and kidney regions appear hyper-intense due to their higher sodium content.

FIG. 8A

Post-contrast sequential contiguous axial ^{23}Na images from an *in vivo* dog heart. Left ventricular blood and kidney regions appear hyper-intense due to their higher sodium content.

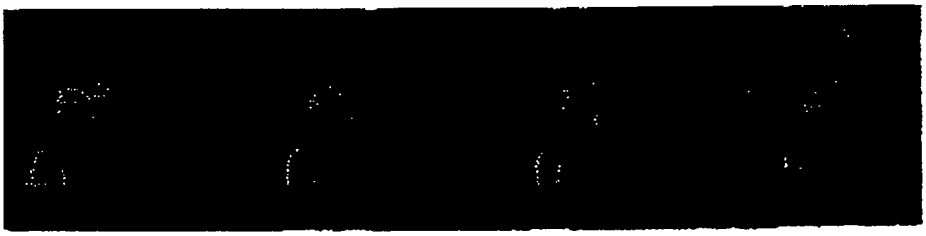

FIG. 8B

Signal variation of myocardial and ventricular blood regions with MION dose in *in vivo* dog hearts (TE=5 ms). Standard deviations represent signal variability from the three animals studied.

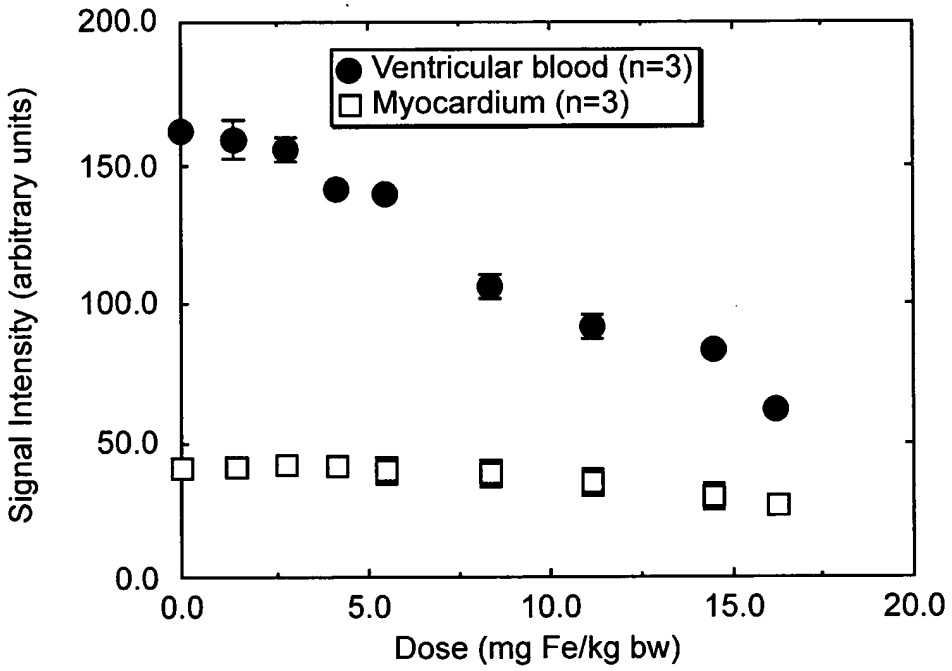

FIG. 9

Pre-contrast short axis ^{23}Na MRI of an infarcted dog at TE=0.37 ms

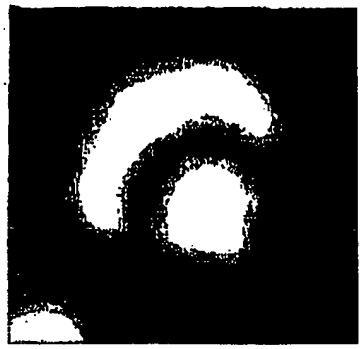

FIG. 10A

Post-contrast images at TE=0.37 ms

FIG. 10B

At TE=5 ms.

FIG. 10C

Corresponding TTC-stained slice (arrows indicate the location of MI)

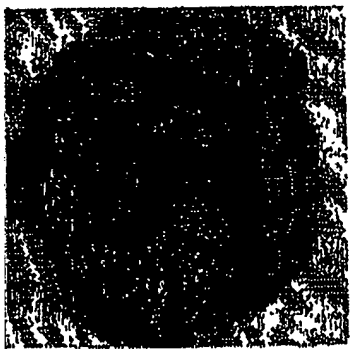

FIG. 10D